

ABSTRACT OF THE DISCLOSURE

A MODULAR WIDE-RANGE TRANSCEIVER

5

The present invention provides a method, apparatus, and processor instructions for wide-range microwave communications. In an exemplary embodiment, a wide-range transceiver is made having pre-calibrated modular units including an IF radio processing card, an RF transmitter module, and an RF receiver module. Calibration factors are loaded into a memory (e.g., EEPROM) in each module during production. Certain additional calibration factors may also be loaded upon installation, such as a one time calibration for the type and length of cable connecting the RF unit to a remote SPU (signal processing unit). A processor in the RF unit is responsive to control signaling indicating a desired transmitter or receiver configuration (e.g., a particular frequency, bandwidth and modulation), to attenuate the signal in the transmitter/receiver path based on the predetermined calibration factors from the applicable modules. A method for calibrating the modules is also disclosed.